REMARKS

A. Request for Reconsideration

Applicants have carefully considered the matters raised by the Examiner in the outstanding Office Action but remain of the opinion that patentable subject matter is present. Applicants respectfully request reconsideration of the Examiner's position based on the attached Declaration of Mr. Yamazaki and the following remarks.

B. The Invention

The present invention is directed to a toner for developing an electrostatic image having a resin and a colorant.

One of the novel aspects of the invention is that 0.1 to 15 wt. % of the monomers that make up the resin have a basic group or an acidic group. This aspect provides for superior image density, fog density and half tone unevenness after long term copying.

C. Claim Status

Claims 1, 6-14 are presented for further prosecution. No amendments have been made herein.

D. Prior Art Rejection

Claims 1, 6-8 and 10-14 had been rejected as being obvious over Nozawa et al. (U.S. 6,555,281) in view of Rimai et al. (U.S. 4,737,433); and claim 9 had been rejected as being obvious over Nozawa in view of Rimai and further in view of Yachi et al. (U.S. 5,773,185).

In a previous Office Action dated January 25, 2007, the Examiner cited Nozawa to teach a toner as recited in Claim 1. Applicants responded to this point made by the Examiner on May 16, 2007, by performing tests that showed that the combination of a monomer being (1) present in an amount of 0.1 to 15 wt. %, and (2) that the monomer present in an amount of 0.1 to 15 wt. % has a basic or an acidic group, resulted in a toner that is surprisingly superior to a toner where 0.1 to 15 wt. % of the monomers that make up the binder resin do not have a basic or an acidic group. These tests were reported in a Declaration by Mr. Yamazaki, submitted on May 16, 2007.

In the present Office Action, the Examiner noted that the test data provided in the Declaration of Mr. Yamazaki submitted May 16, 2007 did not utilize a toner with monomers that contain an acid group and thus, did not utilize a toner within the scope of the instant claims. The Examiner also took the position that the Declaration did not explain the significance of the numeric

difference in fog, and thus the test data was not probative to show an unexpected result for the instant invention.

In order to respond to the Examiner's position, Applicants have submitted a Declaration demonstrating that a combination of a monomer being (1) present in an amount of 0.1 to 15 wt. %, and (2) that the monomer present in an amount of 0.1 to 15 wt. % has a basic or an acidic group results in unexpectedly superior toner. The Declaration by Mr. Yamazaki is attached hereto.

The Examiner's attention is directed to Paragraph 4 of the Declaration. Mr. Yamazaki explains that the Declaration of May 16, 2007 contained an error. Specifically, the Monomer Composition incorrectly listed Methyl Methacrylate (MMA). The Monomer Composition actually contained methylacrylic acid. The Tables attached to the Declaration have been revised, and the Monomer Composition correctly lists methylacrylic acid (MA). Otherwise, the test results and the procedures reported in the Declaration of May 16, 2007 are correct.

It can be seen from the Tables attached to the Declaration that Nozawa 2 had 0 wt. % of a monomer having an acidic group and Modified 4 had 16 wt. % of a monomer having an acidic group. Both Nozawa 2 and Modified 4 fall outside the limitation of claim 1 of the present invention. Modified 1, Modified 2 and Modified 3, on the other hand, had 0.2 wt. %, 5 wt. %, and 14 wt. %, respectively, of a monomer having an acidic group.

Therefore, Modified 1, Modified 2 and Modified 3 fall within the limitation of claim 1.

Thus, as can be seen by the Tables attached to the Declaration, both fog and half-tone unevenness are superior when 0.1 to 15 wt. % of the monomers that make up the resin have a basic group or an acidic group. Specifically, Modified 1, Modified 2 and Modified 3, which had an average fog value of 0.005, exhibited superior results as compared to both Nozawa 2 and Modified 4, which had a fog value of 0.009.

Turning to the Examiner's position that the significance of the numeric difference in fog density was not explained in the Declaration of May 16, 2007, the Examiner's attention is directed to Paragraph 5 of the Declaration submitted herewith. Mr. Yamazaki explains that the differences in fog density may appear negligible but they are significant. For example, after 100,000 copies, the difference in fog densities between Modified 3 (Present Invention) and Modified 4 (Outside Claimed Range) is 0.003. Modified 4 had a fog density 1.5 times higher than Modified 3, and this difference is a fatal for a printer (or copier). A fog density of 0.009 (Modified 4) is not commercially acceptable while a fog density of 0.006 (Modified 3) is acceptable. Attached to the Declaration are actual samples that show the difference between a fog density of 0.009 and a fog density of 0.006. If the Examiner is unable to see

the difference, Applicants offer to bring the samples to the Examiner.

Furthermore, the criticality of the acidic component in the toner can be explained. The charge of the toner increases by introducing an acidic component into the toner resin. However, the charge leaks when the amount of acidic component is excess, particularly in conditions of high temperature and high moisture where water adsorption increases. As a result, toner particles having insufficient charge are generated and this causes fog, as demonstrated in the Declaration of May 16, 2007. Furthermore, the adsorbed water induces water bridging between toner particles, causing toner particles to coagulate. As a result, image defects appear, including white line at half tone density area, as demonstrated by the test data for Nozawa 2 and Modified 4.

In addition, the toner of the present invention has controlled particle shape, defined by shape coefficient as well as particle size and also has sharp charging characteristics. Introducing the acid component and the content thereof are critical for the toner particles having shape limitation as claimed in the present application. These limitations are not disclosed or suggested in the references cited by the Examiner.

Rimai and Yachi do not cure the deficiencies of Nozawa. Neither Rimai nor Yachi teach 0.1 to 15 wt. % of the monomers

that make up the resin have a basic group or an acidic group. Thus, it is respectfully submitted that the combination of Nozawa with Rimai and Yachi does not result in the claimed invention. Respectfully, the claims presented herein are patentable over a combination of the prior art references.

F. Conclusion

In view of the foregoing and the enclosed, it is respectfully submitted that the Application is in condition for allowance and such action is respectfully requested. Should any fees or extensions of time be necessary in order maintain this Application in pending condition, appropriate requests are hereby made and authorization is given to debit account #02-2275.

Respectfully submitted,

LUCAS & MERCANTI, LLP

By: Donald C. Lucas

Donald C. Lucas, Reg. # 31,275
(Attorney for Applicant)
475 Park Avenue South
New York, New York 10016
Tel. # (212) 661-8000

DCL/cmj/mr

Attached: Executed Declaration of Mr. Hiroshi Yamazaki signed on September 7, 2007